Reclamation Bond Estimate
Utelite Mine, M/043/004
August 17, 1987

by
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General: This estimate was based on a nonlandfill reclamation scenario. A number of assumptions had to be made in preparing this estimate since the reclamation plan presumes that the mine will eventually be converted to a landfill. These assumptions are detailed in the reclamation estimate. Unit costs for equipment are based on the Blue Book rental rate plus the hourly operating cost. Labor rates are from the Means Site Work Cost Data book and include benefits and subcontractors profit.

A. Demolition and Cleanup

Tear down and remove concrete storage building and shop-office building. This is assuming that this will require two weeks with crew listed below. This is also assuming that equipment and metal bins are salvageable at no additional cost to the operator.

MANPOWER AND EQUIPMENT	$COST/HR	HRS.	$COST
1 Outside Foreman	32.85	80	2,628
2 Laborers	23.05 ea	80	3,688
1 Equipment Operator	29.85	80	2,388
2 Truck Drivers	23.80 ea	80	3,808
1 Front End Loader (2.5 CY)	61.00	80	4,880
2 Dump Trucks, 16 Ton	50.60 ea	80	8,096
	Subtotal		$25,488

B. Soil Placement, Grading, and Ripping

1. Haul soil material from waste area to cover pit floor.

Assume: a. Highwalls are granted a revegetation variance.

b. One foot of soil is placed over a 1600 foot x 200 foot area (11,850 CY).

c. Use of a 16 CY Scraper on a 2000 foot haul with unfavorable grade and 50 minutes per hour operating efficiency (83 CY/HR - Cat Handbook).

Result: 11,850 CY ÷ 83 CY/HR = 142.7 HRS

2. Regrade and rip disturbed area. Break up and bury foundations, and reroute county road away from stream channel.

Assume: a. Disturbed Area

	Acres
20 percent of Waste Dump	2.0
Pit Floor	7.3
Plant Site	7.3
Product Storage Area	3.5
Stream Channel Area	4.0
	24.1

b. Use of a D-8 with ripper at .5 ACRE/HR

Result: 24 ACRES ÷ .5 ACRE/HR = 48 HRS

MANPOWER AND EQUIPMENT	$COST/HR	HRS.	$COST
1 D-8 W/Ripper	134.07	48	6,435
3 16 CY Scrapers	80.19	48	11,547
4 Equipment Operators	29.85	48	5,731
1 Outside Foreman	32.85	48	1,577
	Subtotal		$25,290

C. Seeding and Fertilizing

Assume: 1. 24 acres to be seeded and fertilized with farm tractor and drill seeder at .75 acre/hr. Assume that 80 percent of waste area has already been revegetated.

2. 20 pounds of seed per acre at $150/acre and 200 pounds of fertilizer per acre at $50/acre.

Result: 24 ACRES ÷ .75 ACRE/HR = 34 HRS
Seed and Fertilizer = $200/ACRE

MANPOWER AND EQUIPMENT	$COST/HR	HRS.	$COST
Farm Tractor W/Drill Seeder	25.00	32	800
1 Tractor Driver	23.45	32	750
1 Laborer	23.05	32	738
Seed and Fertilizer			4,800
	Subtotal		$7,088

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